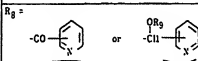


87-15542/19 C02 CIBA 01.10.85
CIBA GEIGY AG *EP-221-844-A
01.10.85-CH-004245 (13.05.87) A01n-43/40 C07d-213/30
New 1-phenoxyl-2-pyridyl-alkenone and -alkenal derivs. - useful as
fungicides, bactericides and plant growth regulators
C87-054345 E1A1 BE CH DE ES FR GB GR IT 11 LU NL SE

C7-D4, 12-A1, 12-A2C, 12-B1, 12-P9 3



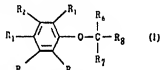
$R_9 = H$, 1-6C alkyl, 3-6C alkenyl, 3-6C alkynyl, or benzyl
(opt. ring-subst. by halo, 1-6C alkyl or 1-6C alkoxy,
both opt. subst. by halo);
provided that the CO gp. in R_9 must be in the 3- or 4-
position when R_1 , R_2 , R_4 , R_5 and R_7 are all H, $R_3 = MeO$ and
 $R_8 = Me$; and R_9 can also be $R_{10}CO$;
 $R_{10} = 1-6C$ alkyl (opt. subst. by halo), 3-6C alkenyl or
alkynyl, 2-3C alkoxy-alkyl, 3-6C cycloalkyl (opt.
subst. by 1-3C alkyl) or phenyl, benzyl or phenethyl
(opt. ring-subst. by halo, 1-6C alkyl or alkoxy, both
opt. subst. by halo).

USE/ADVANTAGE

(I) are microbicides, effective against phytopathogenic
bacteria and fungi; they have curative, systemic and esp.

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Phenoxyalkyl-pyridine derivs. of formula (I) are new:



$R_1 - R_5 = H$, halo, 1-6C alkyl or 1-6C alkoxy (opt. subst. by halo), CN, 1-6C alkoxy-carbonyl or phenyl;

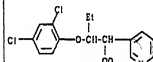
R_6 and $R_7 = H$, 1-6C alkyl, 3-6C alkenyl, 3-6C alkynyl, or phenyl or benzyl (both opt. ring-subst. by halo, 1-6C alkyl or 1-6C alkoxy, both opt. subst. by halo);

preventative properties and can be applied to plants, seeds or soils. Some (I) also have plant-growth regulating activity and at higher doses inhibit excessive vegetative growth of crops.

Prof. application rates are 150-600 g/ha.

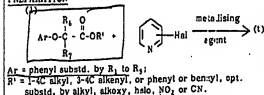
SPECIFICALLY CLAIMED

g Cpd. s. e.g.



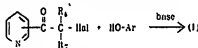
Q = H, Me, MeO or MeO.CH₂CO.

PREPARATION



Reaction is pref. at -130 to 20°C, with Mg (in the form of a Grignard reagent) or BuLi as metallising agent.

(2)



Reaction is pref. at 0-120°C.

Both methods produce ketones which can be reduced conventionally to alcohols and these opt. alkylated or acylated.

EXAMPLE

140.7 g 95% 2,4-dichlorophenyl and 232 g K₂CO₃ were mixed in 1 l acetone, then heated briefly to boiling, cooled to 9°C and gradually treated over 1 hr. with 224.85 3-(bromoacetyl)pyridine hydrobromide.

The mixt. was stirred for 15 hr. at 0-5°C and for 6 hr. at 20°C, then filtered and the mixt. evaporated. Recrystn. of the residue from MeOH gave 2-(2,4-dichlorophenoxy)-1-(3-pyridinyl)-1-ethanone, m.pt. 118-9°C.
(31pp1251DAHDwgh6/6).

(G; ISR: DE2742173 EP-117485 DE2909754.

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